UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
http://www.epa.gov/region08

FEB 27 2018

Ref: 8WP-SDB

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Pem Hall
Director
Ft. Berthold Systems
308 Four Bears Complex
New Town, ND 58763

Re: **2017 Sanitary Survey Report**
PWS ID#: 083890015

Dear Mr. Hall:

Enclosed is a report prepared for the U. S. Environmental Protection Agency (EPA) following a sanitary survey of the above-referenced water system on October 16, 2017. Please note each significant deficiency listed at the beginning of the report. To avoid receiving a violation, you must correct **each identified significant deficiency and submit documentation of the corrective action to the EPA within 6 months** from receipt of this letter and sanitary survey report.

If you will be unable to meet this standard corrective action timeframe, you must contact EPA with a written justification and proposed completion schedule as soon as possible. Each significant deficiency for this water system is listed below:

SURFACE WATER TREATMENT RULE SIGNIFICANT DEFICIENCIES

Significant deficiencies for drinking water systems are defined as defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system that the EPA determines to be causing, or to have the potential for causing, the introduction of contamination into the water delivered to consumers.

1) Gravity Tank ID: ST03 - Dragswolf Tank
Air vent screening on finished water storage tank needs improvement. (see photo #25)

The vent must be fitted with a #24-mesh non corrodible screen to prevent contamination (including contamination carried by insects, rodents, and birds) from entering the water system. The sanitary surveyor was unable to evaluate the tank air vent screen. There is not adequate photo documentation indicating that the screen on this air vent is present, nor is there photo documentation indicating that the vent is equipped with #24 mesh screen.

In order to correct this significant deficiency, you must provide EPA with the following documentation:

- A completed copy of the Unknown Integrity Checklist (air vent section).
- Labeled, up-to-date photos of the air vent screen.
- If there is not #24 mesh screen on the air vent, or if other problems are discovered during the air vent inspection, the date that any corrective actions needed to address deficiencies with the air vent will be completed. EPA will review the integrity checklist and may require additional corrective actions.
- A completed Significant Deficiency Correction Notice listing *each* individual deficiency and the date of correction.

2) Gravity Tank ID: ST02 - Clearwell, Bolted Steel
Unknown integrity of storage tank air vent screen and hatch gasket.

The sanitary surveyor was unable to evaluate the tank air vent screen and hatch gasket, and the water system was not able to produce documentation of the condition of these components. Each item that could not be inspected during the sanitary survey must be inspected and the structure/condition must be compared to the enclosed **Tech Tips for Finished Water Storage Facilities** to determine if corrective action is needed. Tank inspectors can be third-party professionals or appropriately trained in-house staff.

In order to correct this significant deficiency, you must provide EPA with the following documentation:

- A completed copy of the Unknown Integrity Checklist.
- Labeled photos of each tank rooftop tank component the surveyor was unable to access.
- The date that any corrective actions needed to address deficiencies with the tank components will be completed. EPA will review the integrity checklist and may require additional corrective actions.
- A completed Significant Deficiency Correction Notice listing *each* individual deficiency and the date of correction.

Within 6 months from receipt of this letter, you must do the following:

- Correct *each* significant deficiency.
- Provide a completed Significant Deficiency Correction Notice listing *each* individual deficiency and the date of correction.
- Provide labeled photos of *each* correction.

- **If you will be unable to meet the 6 month standard corrective action timeframe, you must contact EPA as soon as possible with a written justification and proposed completion schedule to receive a time extension. Your time extension request must include:**

    - Your public water system name and number;
    - Description of why you will be unable to meet the 6 month timeframe;
    - Description of the corrective action(s) to be taken to address each significant deficiency;
    - A schedule including specific proposed dates for completing each corrective action, which may include short-term interim steps and long-term completion dates.

The Significant Deficiency Correction Notice is enclosed and can also be found at the following website: http://www.epa.gov/region8-waterops/reporting-forms-and-instructions-reporting-forms and by selecting the Sanitary Survey link. To avoid receiving a violation, please provide this documentation to:

Mr. Jake Crosby, Surface Water Treatment Rule Manager
EPA Region 8, 8WP-SDB
1595 Wynkoop Street
Denver, CO 80202

Email: crosby.jake@epa.gov
Phone: 1-800-227-8917, extension 312-6389

If you have any questions regarding a significant deficiency or your corrective action plan, contact Mr. Crosby. Mr. Crosby will provide you with a confirmation email or letter after receiving your response, if you proposed a different corrective action timeframe.

The sanitary surveyor also identified at least one recommendation to improve the operation of the water system and to protect public health. While not required, EPA recommends that all such items be corrected. Please see the enclosed Sanitary Survey report for any recommendations.

Please contact us if your system has a change in the treatment process; you add or remove a water source; there is a change in the number of people served or number of water connections; or different contact information becomes available for your water system. This allows us to keep you up to date on monitoring requirements and keeps our inventory current. To access the EPA's change form, use this link and send us the completed form or give us a call.
http://www.epa.gov/region8-waterops/tribal-public-water-system-change-form

Thank you for your cooperation during the sanitary survey. If you have any questions regarding the sanitary survey, please call Andrea Griese at 605-945-1192. If you have questions on specific regulations, please refer to the brochure enclosed with this letter, which contains the names and phone numbers for all of the EPA drinking water staff.

Sincerely,

Angelique D. Diaz, Ph.D., P.E.
Unit Manager, Drinking Water Unit B
Office of Water Protection

Enclosures

Cc:

Bruce Fox
Supervisor
Fort Berthold Rural Water

Elizabeth Morsette
Operations Manager
Fort Berthold Rural Water

Pat Malnourie
Operator
Four Bears Water Treatment Plant

Dean Karsky
Civil Engineer
Bureau of Reclamation

Denise Fischer
Civil Engineer
Bureau of Reclamation

Kris Neset
Tribal Utility Consultant
Indian Health Service

Brent Rohlfs
Director, DSFC
Indian Health Service

2017 EPA Region 8 TRIBAL SANITARY SURVEY FORM
INVENTORY

DATE OF SURVEY: 10/16/2017	RESERVATION: Fort Berthold	SURVEYOR NAME(S): David Schultz
PWS ID: 083890015	SYSTEM NAME: Four Bears	

System representatives (including titles) present at survey: Bruce Fox, Pem Hall,

IHS team members present: none

BOR team members present: Nathan Watson

Tribal engineer present: Ryan Waters, Bartlett and West Engineering

Comments: _____

EMERGENCY CONTACT

Emergency Contact Name: Pem Hall

Emergency cell phone: (701) 421-0103

Emergency email address: phall@mhanation.com

Title: Acting Director

Street: 308 Four Bears Complex

City: New Town State: ND County: Mountrail Zip: 58763

SYSTEM OWNER OR LEGAL REPRESENTATIVE

Addressee Name: Mark Fox

Title: Chairman

Company (if Corporation, name of Corporation): Mandan, Hidatsa, Arikara, Nation

Street: 404 Frontage Road

City: New Town State: ND Zip: 58763

Owner Phone: (701) 627-4781 Fax: (605) 627-3503

Email Address: chairmanfox@mhanation.com

Tribal Chairman (if different than owner): _____

PRIMARY ADMINISTRATIVE CONTACT
(to receive ALL correspondence from EPA)

Addressee: Pem Hall

Title: Acting Director

Street: 308 Four Bears Complex

City: New Town State: ND Zip: 58763

Administrative Contact Phone: (701) 627-8185 Fax: (_____) _____

Email Address: phall@mhanation.com

ADDITIONAL CONTACT
(if any)

Addressee: Elizabeth Morsette

Title: EPA Operations Manager

Street: 308 Four Bears Complex

City: New Town State: ND County: Mountrail Zip: 58763

Contact Phone: (701) 627-8178 Fax: (701) 627-4303

Email Address: emorsette@mhanation.com

Comments: _____

PUBLIC WORKS DIRECTOR,
TRIBAL ENGINEER and/or WATER PLANT SUPERINTENDENT

Addressee: Bartlett and West Engineering, Ryan Waters

Title: Consulting Engineer

Street: 3456 E. Century Ave.

City: Bismark State: ND County: Burleigh Zip: 58503

Contact Phone: (701) 580-5955 Fax: (_____) _____

Email Address: ryan.waters@bartwest.com

DESIGNATED OPERATOR OF SYSTEM

Name: Bruce Fox

Certified Operator? @ ☒ Yes ☐ No ☐ TNC System (not required)

Treatment Cert. Level: 2 Distribution Cert. Level: _____

Treatment Cert. Exp. Date: 7/1/2018 Distribution Cert. Exp. Date: _____

Cert. Authority: State of ND Cert. Authority: _____

Phone: (701) 421-7512, (701) 759-3069

Email Address: brucefox@mhanation.com

Contract Operator*? ☐ Yes ☒ No

Date contract ends: _____

Comments: Operator Number 4501

ALTERNATE OPERATOR

Name: Mike Mossett

Certified Operator? ☒ Yes ☐ No ☐ Not required

Treatment Cert. Level: 1A Distribution Cert. Level: 1A

Treatment Cert. Exp. Date: _____ Distribution Cert. Exp. Date: _____

Cert. Authority: State of ND Cert. Authority: _____

Phone: (701) 421-5045

Email Address: _____

Comments: _____

WATER SYSTEM CLASSIFICATION BY EPA
for operator certification

System Treatment Classification Level: 2

System Distribution Classification Level: 1

Comments: _____

WATER SYSTEM CLASSIFICATION
from PWS Inventory

☒ C = Community

☐ NTNC = Non-Transient Non-Community

☐ NC = Transient Non-Community

Comments: _____

SYSTEM PHYSICAL ADDRESS

Street: 200 Frontage Road

City: New Town State: ND Zip: 58763

PHYSICAL LOCATION

Physical Location and Directions: Directly east of the Four Bears casino on Highway 23, west of the Four Bears Bridge, on the south side.

CONTACTS

IHS TUC or Sanitarian: Kris Neset

Phone: 701-420-9205

Email: kris.neset@ihs.gov

CONTACTS

BOR Contact: Denise Fischer

Phone: 701-221-1252

Email: dfischer@usbr.gov

PERIOD OF OPERATION

☒ Year-round

☐ Part of the year

From _____ to _____

If only open part of the year, does the entire distribution system remain pressurized during the entire off period? ☐ Yes ☐ No

Comments: _____

SERVICE CONNECTIONS

Total Service Connections (Active and Inactive): 228

Service Connections Metered? ☒ Yes ☒ No Recent connections are metered

Number of metered service connections: 109

Comments: _____

OWNER TYPE

☐ 1 Federal Government (BIA / BIE / BOR)

☒ 2 Federal Government under 638 contract with Tribe

☐ 3 Private: Subdivision, Investor, Trust, Cooperative, Water Association, etc.

Is this PWS operating with a lease on Federal land? ☐ Yes ☐ No
If yes, Federal land name: _____

☐ 4 Mixed Public/Private

☐ 5 Native American Indian Tribes & Reservations _____

☐ 6 Other _____

Comments: _____

POPULATION DIRECTLY SERVED
(do not include populations of consecutive PWSs)
(do not double count populations)

Residential Population (year round residents): 1,000 (people)

Non-Residential Non-Transient Population: _____ (people)
(6-12 months/year)
(e.g. students, employees)

Transient Population (less than 6 months/year): _____ (people per day)
(Average daily number during peak 60 days of operation)
(e.g. customers, visitors)

Does the water system serve at least 25 individuals daily at least 60 days of the year (does not need to be consecutive days)? ☒ Yes ☐ No

Comments (source(s) of population info): PWS did not have data regarding the transient casino population

SERVICE CATEGORY (check all that apply)

☐ AP Airport
☒ BA Bathing/Swimming
☐ BR Bar
☒ CG Campground
☐ CH Church
☐ DC Daycare Center
☐ DR Dude Ranch
☐ HS Hospital
☐ IB Interstate Bottler
☐ IF Industrial/Agricultural
☒ IN Institution
☐ LB Local Bottler
☒ LO Lodge
☒ MA Marina
☐ MH Mobile Home Park
☒ MO Motel/Hotel
☐ PC Picnic Area
☐ RA Rest Area
☐ RC Recreation
☒ RS Residential
☒ RT Restaurant
☒ RV RV Park
☐ SC School
☒ SD Subdivision
☐ SK Ski Area
☒ SS Service Station
☐ US Water User's Association
☐ VC Visitor Center
☐ VM Vending Machine
☒ WH Water Hauler
☐ XX Other _____

Primary Service Category Description: RS

Comments: _____

SOURCES (check all that apply)

☒ SW = Surface Water ☐ SWP = Surface Water Purchased

☐ GW = Groundwater ☐ GWP= Groundwater Purchased

☐ GWUDI = Ground Water Under the Direct Influence of Surface Water

If mixed, does GW receive full SW Treatment? ☐ Yes ☐ No

Is the current water source adequate in quantity?
☒ Yes ☐ No Describe: _____

Have there been any interruptions in service since the last survey?
☐ Yes ☒ No Describe: _____

Have there been reports of a water borne disease (2 or more people)?
☐ Yes ☒ No Describe: _____

Have there been any changes to the water system since the last survey?
☐ Yes ☒ No Describe: _____

Are there any changes that are planned?
☐ Yes ☒ No Describe: _____

Comments: _____

SUMMARY (Describe the water system in a paragraph or two)

The Four Bears public water supply serves approximately 1,000 full time residents, as well as an undetermined number of transient users at the Four Bears Casino and Motel. The water supply serves an area of 50 square miles in northwest McKenzie County in North Dakota. The system draws surface water from Lake Sakakawea, an impoundment on the Missouri River. The water is treated via coagulation, flocculation, and sedimentation, followed by an ultrafiltration membrane filter unit. Disinfection is provided by sodium hypochlorite, with contact time provided by a 183,000 gallon bolted steel tank and a 177,000 gallon ground level concrete clear well, with both of these water storage tanks located adjacent to the plant. Water production averages 486,000 gallons per day. Additional storage is provided by the 300,000 gallon Dragswolf tank, and the 300,000 gallon West Tower tank. The water system has one booster pumping station, The West Booster Station that moves water from the Dragswolf pressure zone to the West Tower pressure zone. The distribution system consists of mostly PVC pipe with some asbestos cement pipe located in the older sections of the system. The McKenzie County Rural Water System has an interconnect with the Four Bears system but is not presently taking water.

The following abbreviations will be used throughout this document: NI = no information, NA = not applicable, NR = not requested, @ = potential significant deficiency.

SIGNIFICANT DEFICIENCIES

Significant deficiencies include, but are not limited to, defects in the design, operation, or maintenance, or a failure or malfunction of the sources, treatment, storage, or distribution system, that EPA determines to be causing, or have the potential for causing, the introduction of contamination into the water delivered to consumers. Please note the instructions for responding to significant deficiencies in the attached cover letter. Failure to provide a response to EPA could result in a violation.

1) Gravity Tank ID: ST03 - Dragswolf Tank

Air vent screening on finished water storage tank needs improvement. (see photo #25)

The vent must be fitted with a #24-mesh non corrodible screen to prevent contamination (including contamination carried by insects, rodents, and birds) from entering the water system. The sanitary surveyor was unable to evaluate the tank air vent screen. There is not adequate photo documentation indicating that the screen on this air vent is present, nor is there photo documentation indicating that the vent is equipped with #24 mesh screen.

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- A completed Significant Deficiency Correction Notice listing *each* individual deficiency and the date of correction.

2) Gravity Tank ID: ST02 - Clearwell, Bolted Steel

Unknown integrity of storage tank air vent screen and hatch gasket.

The sanitary surveyor was unable to evaluate the tank air vent screen and hatch gasket, and the water system was not able to produce documentation of the condition of these components. Each item that could not be inspected during the sanitary survey must be inspected and the structure/condition must be compared to the enclosed **Tech Tips for Finished Water Storage Facilities** to determine if corrective action is needed. Tank inspectors can be third-party professionals or appropriately trained in-house staff.

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- Labeled photos of each tank rooftop tank component the surveyor was unable to access.
- The date that any corrective actions needed to address deficiencies with the tank components will be completed. EPA will review the integrity checklist and may require additional corrective actions.
- A completed Significant Deficiency Correction Notice listing *each* individual deficiency and the date of correction.

UNCORRECTED SIGNIFICANT DEFICIENCIES FROM PRIOR SANITARY SURVEY

NONE

RECOMMENDATIONS

1) A comprehensive preventative maintenance program should be intiated at this PWS. This water utility is large and complex, with multiple treatment plants, intakes, booster stations and tanks. Proper maintenance of this complex system requires a computer based maintenance system that properly tracks equipment usage, schedules needed maintenance tasks, and tracks completed maintenance activities.

2) The hatch of the West Tower (ST01) should be equipped with a locking device.

3) The system should work with the membrane manufacturer (Toray) and the installer (Wigen Water Technologies) to determine the inputs to the log removal value (LRV) calculated by the control system during direct integrity tests (DIT). The system should then coordinate with the EPA to ensure that the calculations are being performed correctly, and modify the control system to resolve any potential issues (if necessary). Errors in these calculations have been discovered at other membrane filtration installations in EPA Region 8.

4) Lead and Copper Rule (LCR) Tap Sample Site Plan must be submitted before required monitoring in 2018.

   Evaluate the Four Bears distribution system per the monitoring requirements under the LCR and submit an updated, verified and certified (signed) plan. Additional instructions on completing an LCR Tap Sample Site Plan can be found here: https://www.epa.gov/sites/production/files/2017-11/documents/lcr_tap_sample_site_plan_instructions.pdf. The LCR Tap Sample Site Form template can be found here: https://www.epa.gov/region8-waterops/lead-and-copper-tap-sample-site-plan.

WHOLESALE SYSTEMS

(i.e. does this PWS supply finished water to another PWS?)
☐ NA

Name of Consecutive (System Supplies Water To)	PWS ID or State ID of Consecutive (if no PWS ID provide contact and address)	Population	Connection Type
McKenzie County Rural Water	ND2701682	393	☒ Permanent ☐ Seasonal, # Days/Yr _____ ☐ Emergency Only ☐ Water is hauled (bulk water fill stations are described in Distribution section)
_____	_____	_____	☐ Permanent ☐ Seasonal, # Days/Yr _____ ☐ Emergency Only ☐ Water is hauled (bulk water fill stations are described in Distribution section)
_____	_____	_____	☐ Permanent ☐ Seasonal, # Days/Yr _____ ☐ Emergency Only ☐ Water is hauled (bulk water fill stations are described in Distribution section)

Comments: McKenzie County Rural Water has a connection but is not taking any water.

How many master meter connections exist off the wholesale system? 1

Who is responsible for maintenance of those connection(s)?

☒ Wholesaler

☐ Consecutive system

Comments: _____

If the wholesaler is responsible, how often is inspection performed on the master meter connection(s)? Monthly

If the wholesaler is responsible, how often is maintenance performed on the master meter connection(s)? _____

Does standing water exist in any meter pits for which the wholesale system is responsible? ☐ Yes ☒ No

If so, what is the source of the standing water?

☐ Leaks @

☐ Groundwater

☐ Don't know @

Comments: _____

SOURCE DATA FOR INTAKE LOCATED IN RESERVOIRS, LAKES, AND PONDS AND ASSOCIATED PUMPS

☐ NA

STREAMS

Stream name: Lake Sakakawea (Missouri River)

Facility ID (from PWS Inventory, e.g., IN01): RS01

Is the area around the intake restricted?
☒ Yes ☐ No

Are there multiple intakes located at different levels?
☒ Yes ☐ No Describe: There are two intakes, the newest one was installed in 2008. The older intake is used for industrial water sales and as a backup for the water plant.

Are the intake(s) screened?
☒ Yes ☐ No

Frequency of intake inspection: Pump house inspected at least weekly.

Date of last inspection: NI

Are there seasonal algal blooms present? ☐ Yes ☒ No

Describe: _____

Is an algaecide ever used to control algae? ☐ Yes ☒ No

If yes, describe: _____

Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report

INTAKE PUMPS

Location of the pump station: Shore of the lake, adjacent to the water treatment plant.

How many pumps at the facility? 2

Type of pump(s): Submersible, mounted in angled intake pipes.

	Yes	No	NA
Are the correct types of lubricants (NSF-60) used?	☐	☐	☒
Are pumps operable and in good condition?	☒	☐	☐
Is there a maintenance program in operation?	☐	☒	☐
Is the pump station subject to flooding?	☐	☒	☐
Are spare parts available?	☐	☒	☐
Is emergency power available?	☐	☒	☐

Comments: Spare pumps and parts are readily available through local suppliers. A preventative maintenance program is presently being developed.

Are there any sources of pollution near the stream (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could impact water quality? @ ☐ Yes ☒ No

If yes, indicate impacted stream(s) and provide general location and comments (please locate on aerial map and provide photos): _____

How far from the stream is the source of pollution located? _____

Are there seasonal variations in the quantity of the water? ☐ Yes ☒ No The deep intake provides a reliable source of water despite reservoir level fluctuations.

Are there seasonal variations in the quality of the water? ☒ Yes ☐ No Turbidity levels increase during spring runoff or after large precipitation event.

Comments: _____

SOURCE DATA FOR INTAKE LOCATED IN EMERGENCY BACKUP SOURCE WATER

Describe any backup source water possibly available during an emergency to the PWS, or indicate none: None

Is the backup water source physically disconnected from the water system? ☐ Yes ☐ No _____
(if this is a raw water source and is still physically connected to the system, then stop filling out this section and complete the applicable source data section)

Backup source name: _____

Facility ID (from PWS Inventory, e.g., IN01, WL01, etc.): _____

Are there seasonal algal blooms present? ☐ Yes ☐ No ☐ NA

Describe: _____

Is an algaecide ever used to control algae? ☐ Yes ☐ No ☐ NA

If yes, describe: _____

Please copy or photograph any available construction diagrams or "as-builts" and submit with the sanitary survey report

Are there any sources of pollution near the emergency backup source (e.g., agriculture/industrial activities, cleaning supplies, oil/fuel, etc.) which could impact water quality? @ ☐ Yes ☐ No

If yes, indicate impacted emergency backup source(s) and provide general location and comments (please locate on aerial map and provide photos): _____

How far from the emergency backup source is the source of pollution located? _____

Mice or other animals and their droppings in immediate area **(well house, vault, pit, etc.).** ☐ Yes ☐ No _____

Are there seasonal variations in the quantity of the water? ☐ Yes ☐ No _____

Are there seasonal variations in the quality of the water? ☐ Yes ☐ No _____

Comments: _____

RAW WATER TO TREATMENT PLANT TRANSMISSION LINE

☐ NA

Name or designation: Raw water transmission main

SW ☒ GW ☐

Point of origin: Intake

Point of termination: Water treatment plant

Approximate Length: 400'

Material: PVC

Are there any service connections off the raw water transmission line? @ ☐ Yes ☒ No _____
(Check yes only if the water system provides treated water to the rest of the distribution system)

What does each connection serve? _____

If used for potable water supply, is there a legal agreement or contract in place? ☐ Yes ☐ No _____

If used for potable water supply, is the water treated at the connection and how? ☐ Yes ☐ No _____

DISTRIBUTION BOOSTER PUMP STATIONS

☐ NA

Location of the pump station: West Booster Station. Located approximately 3.5 miles west of the Four Bears WTP on the north side of US Highway 23-PF01

How many pumps at the facility? 2

Type of pumps: Vertical turbine, inline boosters with variable frequency drives

	Yes	No	NA	
Are the correct types of lubricants (NSF-60) used?	☒	☐	☐	_____
Is the pump station subject to flooding? @	☐	☒	☐	Pump station is in a vault but adequate flood protection measures are installed. A sump pump and high water warning system are in place.
Are pumps operable and in good condition?	☒	☐	☐	_____
Is there a maintenance program in operation?	☐	☒	☐	A preventative maintenance program is being developed
Are spare parts available?	☒	☐	☐	_____
Is emergency power available?	☐	☒	☐	_____

GRAVITY TANKS

☐ NA

Complete for all tanks at ground water systems and consecutive systems. Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Clearwell, Bolted Steel**	**Clearwell, Concrete**	**West Tower**
Tank ID (from PWS inventory, e.g., ST01):	ST02	ST04	ST01
Tank owner (if different than system owner):	____	____	____
Location (indoor or outdoor):	Outdoor, @ Water Treatment Plant	Outdoor, @ Water Treatment Plant	Outdoor
Date put into service	2012	1997	2003
Tank Type: Below ground (buried or partially buried)	☐	☒	☐
Tank Type: Ground level	☒	☐	☐
Tank Type: Elevated (pedestal or standpipe)	☐	☐	☒
Tank is constructed of: Concrete	☐	☒	☐
Tank is constructed of: Steel	☒	☐	☒
Tank is constructed of: Fiberglass	☐	☐	☐
Tank is constructed of: Other	____	____	____
What type of water is stored (GW systems only)?	☒ Treated ☐ Raw	☒ Treated ☐ Raw	☒ Treated ☐ Raw
Storage volume (gallons)?	183,000	177,300	300,000
Is the site subject to flooding? @	☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No
Can the tank be isolated from the system?	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No
Is the water level indicator accurate?	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No
Does the tank appear structurally sound? @	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No
Does the foundation appear structurally sound? @	☒ Yes ☐ No	☒ Yes ☐ No	☒ Yes ☐ No
Are there any unprotected openings in the tank (breaches, leaks, etc)? @	☐ Yes ☒ No	☐ Yes ☒ No	☐ Yes ☒ No
Inspection and cleaning history			
If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? @	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
When and how was the tank last cleaned and inspected?	____	2012	2012
Who performed the cleaning and inspection?	____	Midco Diving and Marine	Midco Diving and Marine
How was the tank disinfected after cleaning? (NA if diver used)	____	NA	NA
Surveyor able to view report and confirm date?	☐ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☒ No
If yes, note major concerns and/or recommendations:	____	____	____
If Carcasses or other debris found in the tank:			
Was EPA notified immediately?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Was the entry point for the carcass or debris eliminated?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Describe:	____	____	____
Overflow			
Does the tank have an overflow separate from the vent? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the overflow accessible for inspection? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Overflow has a #24 mesh screen OR a duckbill valve OR a properly sealed flapper valve with screen inside (EPA recommends a #24 mesh screen)? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the discharge visible?	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA
Comments about overflow:	____	____	____
Drain Line			

Complete for all tanks at ground water systems and consecutive systems. Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Clearwell, Bolted Steel**	**Clearwell, Concrete**	**West Tower**
Combined overflow and drain pipe? (If yes, skip drain questions)	☐ Yes ☒ No ☐ NA	☐ Yes ☒ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the drain accessible for inspection? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Is there #24 mesh screen on the drain pipe?	☐ Yes ☒ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Does water accumulate in the drain discharge area?	☐ Yes ☒ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate between 12 and 24 inches above a drainage area?	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate above an inlet structure, splash plate, or engineered rip-rap?	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA
Comments about drain:	The above questions are in reference to the drain documented in photo # 9. It is also possible that the clearwell is drained by the fire hydrant documented in photo #8.	There is no drain for this tank	———
Air Vent			
Does the tank have a vent separate from the overflow? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the vent accessible for inspection? @	☐ Yes ☒ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
For above ground tanks (ground level or elevated/standpipe):			
Is there #24 mesh screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA
If not #24 mesh screen, what size mesh is the screen?	———	———	———
Does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage?	☐ Yes ☒ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☒ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA
Downturned vent: Is the vent at least 24" above the roof? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA
For non-downturned vents: Is there a solid cover down to the bottom of the vent screen? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ NA
For non-downturned vents: Is the screen at least 8" above the roof surface? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☒ NA
Below Ground Tanks (buried or partially buried)			
Is air vent covered with #24 mesh screen? @	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA
Does the air vent terminate downward? @	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA
Is the air vent at least 24" above the roof or ground surface (whichever is higher)? @	☐ Yes ☐ No ☒ NA	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☒ NA
Comments about air vent:	Surveyor was unable to view air vent. Vent cover and height info taken from previous survey. 24-mesh screen present during previous survey.	———	Air vent info derived from inspection report and photos provided by Kris Neset of the IHS, from inspection performed 9/16/2017.
Access Hatch			
Is the hatch accessible for inspection? @	☐ Yes ☒ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the hatch raised at least 24" above the roof or ground (whichever is higher) on below ground tanks (buried or partially buried) or 4" above the roof for above ground tanks (ground level or elevated)? @	☒ Yes ☐ No ☐ NA	☐ Yes ☒ No ☐ NA	☒ Yes ☐ No ☐ NA
What is the height of the access hatch above the roof or ground surface?	4 in	12 in	7 in

Complete for all tanks at ground water systems and consecutive systems. Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Clearwell, Bolted Steel**	**Clearwell, Concrete**	**West Tower**
Does the hatch have a shoe box cover? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the hatch cover tight and sealed with a rubber gasket? @	☐ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA
Is the hatch locked? @	☒ Yes ☐ No ☐ NA	☒ Yes ☐ No ☐ NA	☐ Yes ☒ No ☐ NA
Comments about access hatch:	Surveyor was unable to view the hatch. Previous survey shows shoebox lid and correct height. Gasket was present during previous survey.	———	Hatch info derived from inspection report and photos provided by Kris Neset of the IHS, from inspection performed 9/16/2017
Comments:	———	———	———

GRAVITY TANKS

☐ NA

Complete for all tanks at ground water systems and consecutive systems Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Dragswolf Tank**	____	____
Tank ID (from PWS inventory, e.g., ST01):	ST03	____	____
Tank owner (if different than system owner):	____	____	____
Location (indoor or outdoor):	Outdoor	____	____
Date put into service	2008	____	____
Tank Type — Below ground (buried or partially buried) / Ground level / Elevated (pedestal or standpipe)	☐ / ☒ / ☐	☐ / ☐ / ☐	☐ / ☐ / ☐
Tank is constructed of: — Concrete / Steel / Fiberglass / Other	☐ / ☒ / ☐ / ____	☐ / ☐ / ☐ / ____	☐ / ☐ / ☐ / ____
What type of water is stored (GW systems only)?	☒ Treated ☐ Raw	☐ Treated ☐ Raw	☐ Treated ☐ Raw
Storage Volume (gallons)?	300,000	____	____
Is the site subject to flooding? @	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No
Can the tank be isolated from the system?	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the water level indicator accurate?	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the tank appear structurally sound? @	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Does the foundation appear structurally sound? @	☒ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Are there any unprotected openings in the tank (breaches, leaks, etc)? @	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No
Inspection and cleaning history			
If the tank is more than 10 years old, was it cleaned and inspected within the last 10 years? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
When and how was the tank last cleaned and inspected?	2012	____	____
Who performed the cleaning and inspection?	Midco Diving and Marine	____	____
How was the tank disinfected after cleaning? (NA if diver used)	NA	____	____
Surveyor able to view report and confirm date?	☐ Yes ☒ No	☐ Yes ☐ No	☐ Yes ☐ No
If yes, note major concerns and/or recommendations:	____	____	____
If Carcasses or other debris found in the tank:			
Was EPA notified immediately?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Was the entry point for the carcass or debris eliminated?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Describe:	____	____	____
Overflow			
Does the tank have an overflow separate from the vent? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the overflow accessible for inspection? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Overflow has a #24 mesh screen OR a duckbill valve OR a properly sealed flapper valve with screen inside (EPA recommends a #24 mesh screen)? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow line terminate no less than 12 inches but no more than 24 inches above the ground surface? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow discharge over an inlet structure, splash plate, or engineered rip-rap? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the discharge visible?	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the overflow have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about overflow:	____	____	____

Complete for all tanks at ground water systems and consecutive systems Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Dragswolf Tank**	_____	_____
Drain Line			
Combined overflow and drain pipe? (If yes, skip drain questions)	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the drain accessible for inspection? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is there #24 mesh screen on the drain pipe?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does water accumulate in the drain discharge area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe have an air gap of 3 or more pipe diameters above the entrance to any storm or sanitary sewer? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate between 12 and 24 inches above a drainage area?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the drain pipe terminate above an inlet structure, splash plate, or engineered rip-rap?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about drain:	_____	_____	_____
Air Vent			
Does the tank have a vent separate from the overflow? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the vent accessible for inspection? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For above ground tanks (ground level or elevated/standpipe):			
Is there #24 mesh screen? @	☐ Yes ☒ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
If not #24 mesh screen, what size mesh is the screen?	Unknown	_____	_____
Does the tank have a vacuum/pressure relief valve or other mechanism to prevent tank damage?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Downturned vent: Is the vent at least 24" above the roof? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned vents: Is there a solid cover down to the bottom of the vent screen? @	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
For non-downturned ventsis the screen at least 8" above the roof surface? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Below Ground Tanks (buried or partially buried)			
Is air vent covered with #24 mesh screen? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the screen on the inside of the vent pipe to discourage vandalism?	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Does the air vent terminate downward@	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the air vent at least 24" above the roof or ground surface (whichever is higher)? @	☐ Yes ☐ No ☒ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about air vent:	_____	_____	_____
Access Hatch			
Is the hatch accessible for inspection? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch raised at least 24" above the roof or ground (whichever is higher) on below ground tanks (buried or partially buried) or 4" above the roof for above ground tanks (ground level or elevated)? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
What is the height of the access hatch above the roof or ground surface?	almost 4 (photo #26) in	_____ in	_____ in
Does the hatch have a shoe box cover? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch cover tight and sealed with a rubber gasket? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Is the hatch cover locked? @	☒ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA	☐ Yes ☐ No ☐ NA
Comments about access hatch:	_____	_____	_____

Complete for all tanks at ground water systems and consecutive systems Also complete for finished water tanks at surface water / GWUDI systems. (Includes indoor clearwells and contact tanks or other finished water tanks.)			
Tank Name:	**Dragswolf Tank**	_____	_____
Comments:	Dragswolf tank info provided by Nathan Watson of the BOR from an inspection he made on 10/19/2017. Surveyor was unable to access the site.	_____	_____

WATER TREATMENT DATA
SURFACE WATER / GWUDISW SYSTEMS

☐ NA

General Information

For each treatment plant indicated on the overall PWS schematic, update the separate treatment plant schematic. Show all treatment processes, recycle streams, turbidimeter locations, raw water and finished water sampling points, and disinfectant residual sampling points.

In this section, the ¥ symbol indicates a potential violation to be determined by the EPA Rule Manager

Plant Location and Information

Plant / Office Location and Directions: Immediately east of the Four Bears Casino on ND Hwy 23 on the west bank of Lake Sakakawea.

Date plant put online: 9/22/2011

Modifications since the last survey? (if yes, describe): No

Describe water sources treated by this plant: Lake Sakakawea

Is treatment impacted by algae (describe)? No

Plant Output (gal / day)

Design: 1,500,000

Summer Average: 486,000

Winter Average: 350,000

Maximum: 1,000,000

Provide a brief description of the plant's treatment processes: Raw water from the lake enters the plant and is dosed with the coagulant chemical (AquaHawk 607). The flow then splits with 1/4 of the water passing through the older flocculator and plate settlers, and the remaining 3/4 of the water passing through the newer flocculator and plate settlers. Following sedimentation the plant contains two parallel, pressure, ultra-filtration membrane filter units. Each filter unit consists of a 3,300 gallon tank that receives water from the plate settlers, followed by a pump that discharges to the membranes. Following filtration the water is disinfected with sodium hypochlorite and then flows through two clearwells operating in series. The first clearwell is an above ground, unbaffled, bolted steel tank. The second clearwell is a partially buried, baffled, concrete tank. High service pumps take suction from the second clearwell and discharge to distribution.

Indicate all points in the treatment process where flow is determined and describe how (i.e. flowmeters, flow restrictors, valves, etc): Mag meters on the flocculator feed inlet, mag meter for measuring filter wash flow rate, mag meters on the inlet to each filter train.

Please indicate all of the treatment plant waste disposal methods the plant currently employs:

- ☐ Discharge to surface, sewer, or equivalent. Please describe: _____
- ☐ On-site disposal. Please describe: _____
- ☐ Land application
- ☒ Discharge to lagoon/drying bed, with no recovery/recycling – e.g., downstream outfall
- ☐ Backwash recovery/recycling: discharge to basin or lagoon and then to source
- ☐ Backwash recovery/recycling: discharge to basin or lagoon and then to plant intake
- ☐ Other. Please describe: _____
- ☐ No wastes generated

Pre-Filtration Processes

Pre-Sed Basin: ☐ Yes ☒ No

Rapid Mix: ☒ Yes ☐ No

Describe Type: New sedimetation train has a mechanical mixer, old sedimentation train has a static mixer.

Chemicals added: ☒ Yes ☐ No (If yes, input chemical information in table below)

Flocculation: ☒ Yes ☐ No

Describe Type: New sedimenation train has a horizontal, paddle flocculator. The old train has vertical shaft two stage flocculation.

Chemicals added: ☐ Yes ☒ No (If yes, input chemical information in table below)

Sedimentation: ☒ Yes ☐ No

Describe Type: Plate settlers

Chemicals added: ☐ Yes ☒ No (If yes, input chemical information in table below)

Other: ☐ Yes ☒ No

Chemical Information (ask system to provide information from chemical supplier / manufacturer):

Manufacturer	Product Name	Location Chemical Added	Max Dose Used (past 12 months):	NSF 60 Certified?	NSF 60 Max Allowable Dose
Hawkins	AquaHawk 607	mixers	25 mg/L	☒ Yes ☐ No	250 ppm
_____	_____	_____	_____	☐ Yes ☐ No	_____
_____	_____	_____	_____	☐ Yes ☐ No	_____
_____	_____	_____	_____	☐ Yes ☐ No	_____
_____	_____	_____	_____	☐ Yes ☐ No	_____

NSF 60 certification and max. allowable dose info. can be found at: http://info.nsf.org/Certified/PwsChemicals/

Does the system use a chemical containing epichlorohydrin or polyacrylamide that is dosed in excess of the NSF 60 Max Allowable Dose? ¥
☐ Yes ☒ No

Filtration Processes

General

Indicate all types of filtration used:

☐ Conventional	☐ Bags / Cartridges	☐ Slow Sand
☐ Direct	☒ Membranes	☐ Diatomaceous Earth

Which is the final filtration barrier?: Ultrafiltration Membranes

Type and model # of combined filter effluent (CFE) turbidimeter: Hach FilterTrak 660sc

Location of CFE turbidimeter: Before clearwell

Frequency of all turbidimeter calibration(s): Quarterly

Date(s) of last turbidimeter calibration(s) for all turbidimeters: 9/20/2017

Method used for all calibrations (primary formazin standard or other)? Formazin

Yes	No	
☒	☐	Does the location of the CFE turbidimeter comply with EPA policy SWTR #5? @
☒	☐	Are turbidimeters calibrated at least once every quarter? @
☒	☐	Does the system use a primary standard to perform the calibration? @
☒	☐	Are CFE turbidity records available for the last 5 years? ¥
☒	☐	Can CFE turbidities be recorded up to 5 NTU? @ How high can they be recorded: 5.0
☒	☐	Can turbidities associated with off-periods (backwash, FTW) be identified so they are not counted for compliance? (if applicable) @

Finished water CFE turbidity (NTU): PWS measurement: 0.030 Surveyor measurement: 0.10 - was below range of Hach 2100 P instrument

Membranes

Number of membrane skids: 2 Configuration: ☒ parallel ☐ series

Membrane type: ☐ microfiltration ☒ ultrafiltration ☐ nanofiltration ☐ RO

Manufacturer: Toray Industries Model #: HFS-2020 Absolute pore size: 0.02 um

Each skid capacity (gpm): 400

Yes	No	
☒	☐	Has the PWS consistently been meeting the CFE turbidity requirements for this type of filtration? (0.3 NTU 95% of each month, 1 NTU max) ¥
☒	☐	Are direct integrity tests (DIT) performed at least daily (specify ☒ pressure or ☐ vacuum applied)? ¥ If yes, how often? ¥ one per day
☒	☐	For continuous indirect integrity testing, does each unit/skid have its own online turbidimeter? ¥
☒	☐	a. Is filtrate turbidity monitored continuously and recorded at least once every15 minutes? ¥
☒	☐	b. Is it set with a trigger level of 0.15 NTU for > 15 minutes (a DIT should be initiated when filtrate turbidity exceeds this level)? ¥
☒	☐	Do operators know how to check and repair membranes when a DIT fails? @

How/when are membranes cleaned? Each skid is backwashed every 47 minutes

Are spare membrane cassettes available? ☒ Yes ☐ No

Is there adequate storage of cleaning chemicals in case of emergency weather? Yes

Log removal credited for this type of filtration barrier for: *Giardia*: 4.0 Viruses: 0.0 Cryptosporidium: 4.0 (the pre-treatment system may be eligible to receive an additional 1.5 log credit).

Disinfection Processes

General

Describe all inactivation processes, **both pre-filtration and post-filtration:** Sodium hypochlorite added after membrane filtration prior to the clearwells.

Chemical Disinfection

Chlorine and Chloramines

Type: Sodium hypochlorite (Azone 15) Dosage: 1.5 mg/L target dose (lb / day or mg/L) NSF 60 Certified? ☒ Yes ☐ No

Point of application: After membrane filtration

Where does the PWS measure disinfectant residual for compliance with the SWTR requirement of ≥ 0.2 mg/L at the POE? High service pump discharge

Is this before the 1st user of the water? ¥ ☒ Yes ☐ No

How is residual measured? ☒ continuous ☐ grab Equipment / manufacturer model #: Hach CL-17

What type of measurement is taken? ☒ free ☐ total

Chlorine residual at POE (mg/L): PWS measurement: 0.25 ppm Surveyor measurement: 0.20 ppm

Are the two measurements within 0.1 mg/L or 15% of one another (whichever is larger)? @ ☒ Yes ☐ No

Yes	No	
☒	☐	Is there redundant disinfection equipment?
☒	☐	Is there emergency power for the disinfection equipment?
☒	☐	If measuring residual continuously, is the PWS conducting weekly verifications with a grab sample measurement? @

Chemical Disinfection – Inactivation Calculations

If the PWS performs ongoing daily or weekly CT calculations, use their actual data to document inactivation in the section below. Otherwise, do a conservative calculation for each inactivation segment.

Identify location of 1st user: Water treatment plant

Summer Calculations Lowest* disinfectant residual and where measured (mg/L): 0.48, discharge of high service pump. Water temperature (lowest*): 10°C Water pH (highest*): 8.0 Maximum* flow through segment: 460 gpm (governed by high service discharge pump rate) Describe each segment and list appropriate baffling factor: Concrete clearwell with a minimum operating capacity of 124,365 gallons and a baffling factor of 0.7. Normal operation involves water flow through the 183,000 gallon bolted steel tank prior to the concrete clearwell, however, previous surveys reported that water flow sometimes bypasses this tank. This disinfection segment was not included in these calculations as a result.	List the volume of each segment using minimum* operating heights of tanks: Concrete clearwell volume at minimum operating capacity = 124,365 gallons. Total logs *Giardia* inactivation from all chemical disinfection segments: 1.81 (contact time = 189 min, CT = 91 min*mg/L) Total logs virus inactivation from all chemical disinfection segments: 60.56
Winter Calculations Lowest* disinfectant residual and where measured (mg/L): 0.62, discharge of high service pump Water temperature (lowest*): 0.5°C Water pH (highest*): 8.0 Maximum* flow through segment: 460 gpm (governed by high service discharge pump rate) Describe each segment and list appropriate baffling factor: Concrete clearwell with a minimum operating capacity of 124,365 gallons and a baffling factor of 0.7. Normal operation involves water flow through the 183,000 gallon bolted steel tank prior to the concrete clearwell, however, previous surveys reported that water flow sometimes bypasses this tank. This disinfection segment was not included in these calculations as a result.	List the volume of each segment using minimum* operating height of tanks: Concrete clearwell volume at minimum operating capacity = 124,365 gallons. Total logs *Giardia* inactivation from all chemical disinfection segments: 1.22 (contact time = 189 min, CT = 117 min*mg/L) Total logs virus inactivation from all chemical disinfection segments: 39.11

* Use data from system's ongoing CT calculations if available. Values should correlate to the system's lowest calculated inactivation levels during the specified season in the previous year.

Chemical Disinfection – Disinfection Profiling (if system is exempt, skip section)

Yes	No	
☐	☒	Does the system have a disinfection profile on site that contains a year of weekly log inactivation calculations (<10,000 pop.) or a year of daily log inactivation calculations (>10,000 pop)? @
☐	☒	Did the PWS make a significant change (new disinfectant; new location; etc.) to disinfection practices after 7/1/03 or 1/1/04?
☐	☐	If yes, was EPA consulted? Describe the change and date made: ¥ _____

When was the profile conducted? Not Required

Lowest monthly average log inactivation observed from the profile (month/value): *Giardia:* NA Viruses: NA

Overall Inactivation / Removal Calculations

Viruses / Giardia

Viruses	***Giardia***
0 Logs Removal (filtration)	4 Logs Removal (filtration)
39.11 Logs chemical inactivation (lowest value from Summer / Winter calculations)	1.22 Logs chemical inactivation (lowest value from Summer / Winter calculations)
_____ Logs UV inactivation	_____ Logs UV inactivation
_____ Logs other removal or inactivation	_____ Logs other removal or inactivation
39.11 Total logs inactivation / removal	5.22 Total logs inactivation / removal
≥ 4 logs? @ ☒ Yes ☐ No	≥ 3 logs? @ ☒ Yes ☐ No

Cryptosporidium

Committed to install maximum treatment? ☐ Yes ☒ No

If no, what is the system's bin #? ☒ Bin #1 ☐ Bin #2 ☐ Bin #3 ☐ Bin #4

System Classification: ☒ Filtered ☐ Unfiltered

*If system completed sampling and was classified as a Bin #1 system, the section below does not need to be completed. For all other systems, please complete the section below.

Total logs Cryptosporidium inactivation / removal required based on max treatment, bin # or classification: _____

Date treatment required by: _____ Toolbox Components Utilized: _____

_____ Logs Removal (filtration)

_____ Logs chemical inactivation

_____ Logs UV inactivation

_____ Logs other Toolbox Components

_____ Total logs inactivation / removal

≥ required logs? ¥ ☐ Yes ☐ No

WATER TREATMENT DATA (FOR ALL SYSTEMS)

CORROSION CONTROL

Does this PWS add chemicals for Corrosion Control? ☐ Yes ☒ No

Comments: _____

Chemical added:	NSF 60 Certified?	Dosage at Treatment Plant	Added Continuously or Seasonally
_____	☐ Yes ☐ No	_____	☐ Continuously ☐ Seasonally
_____	☐ Yes ☐ No	_____	☐ Continuously ☐ Seasonally
_____	☐ Yes ☐ No	_____	☐ Continuously ☐ Seasonally
_____	☐ Yes ☐ No	_____	☐ Continuously ☐ Seasonally

Do you monitor corrosion control treatment chemical concentrations, pH or any other water quality parameters at the entry point to the distribution system or at customer taps to evaluate the process? ☐ Yes ☐ No

Comments: _____

DISTRIBUTION DATA

Please provide a brief description of the distribution system, including source to use piping: The Four Bears distribution system consists of piping ranging in size 2" through 12", with about 13% of the system being 2" distribution pipe, and 27% of the system consisting of 6" and 8" water mains.

What are the location and estimated linear feet of asbestos pipe in the distribution system? Exact footage is unknown. There is a small quantity of asbestos cement pipe located in the Dragwolf Community and at the Minne Tohe Clinic.

Have lines broken due to freezing? ☐ Yes ☒ No _____

Have lines broken due to traffic load? ☐ Yes ☒ No _____

Are lines properly disinfected after repairs are made? @ ☒ Yes ☐ No _____

Is there at least 35 psi pressure in the distribution system at peak normal flow? ☒ Yes ☐ No _____

Is there at least 20 psi at all points in the system at all times? @ ☒ Yes ☐ No The operators report that they maintain at least 20 psi at all times.

For systems that provide water storage:

Total number of days of storage (Summer)? 1.8

Total number of days of storage (Winter)? 2.5

	Yes	No	NA
Is the storage capacity adequate to meet current needs?	☒	☐	☐
Is the storage capacity adequate to meet future needs?	☒	☐	☐

Comments: _____

Are there any bulk water supply/fill stations attached to this system? ☒ Yes ☐ No _____

(note to surveyor: if yes, check each facility, note its condition and provide photos)

Station name (if applicable)	Location	Appropriate Air Gap or RPZ?
Four Bears Plant	At the water treatment plant	☒ Air Gap ☐ RPZ ☐ Neither @
_____	_____	☐ Air Gap ☐ RPZ ☐ Neither @
_____	_____	☐ Air Gap ☐ RPZ ☐ Neither @

Comments: _____

Are there any air relief valves in vaults/pits located in the distribution system? ☐ Yes ☒ No _____

Note to surveyor: If yes, inspect one representative ARV, note its condition and provide photos

Are they regularly inspected and maintained? ☐ Yes ☐ No _____

Do any have leaks and/or standing water that covers the discharge point? @ ☐ Yes ☒ No _____

Location, length, number, and flushing frequency for dead ends in the system: There are 11 dead ends that are flushed twice per year.

Are distribution system ("as-built") drawings maintained (e.g., revised to show replacement or repair?) ☒ Yes ☐ No _____

For systems that add a chemical disinfectant or receive disinfected water from a wholesaler: NA ☐

Yes	No	
☒	☐	Is test equipment available for measuring the chlorine residual in the distribution system? Describe equipment: Hach Colorimeter
☒	☐	Are reagents up to date? _____
☒	☐	Does the operator know how to properly measure chlorine residual? _____

Measured chlorine residual distribution system location: West Tower

Indicate residual value measured at this distribution system location: By Surveyor: 0.70 (mg/L) By PWS: 0.80 (mg/L)

Indicate if free or total chlorine was measured: Free

It is recommended that a minimum residual of 0.5 mg/L total chlorine or 0.2 mg/L free chlorine be maintained.

CROSS CONNECTION CONTROL

Yes	No	NA	
☐	☐	☒	**Does each severe hazard connection** have the appropriate reduced pressure backflow assembly installed at the meter/service connection and approved air gap (twice the size of the supply pipe diameter but always greater than one inch)? Describe each severe hazard connection and its location. @ _____ Note: Severe hazard connections include radioactive materials processors, nuclear reactors, and sewage treatment plants/pump stations.
☒	☐	☐	**Does each high hazard connection** in the treatment plant or distribution system have the appropriate air gap or reduced pressure backflow assembly installed? Describe each high hazard connection and its location. @ Bulk water loading station at the plant equipped with an air gap. Note: High hazard connections include hospitals, medical/dental facilities, laboratories, mortuaries, large taxidermies, chemical suppliers/processing facilities, petroleum plants, food processing facilities, wastewater treatment plants, piers and docks, car washes, dry cleaners, direct connections to raw or non-potable water, and any service connection with an unapproved auxiliary supply.
☐	☐	☒	Do **trailers or mobile homes connected directly to the PWS** via a yard hydrant have a residential dual check valve at each connection? _____
☒	☐	☐	Are any **frost-free hydrants** that drain into the soil directly connected to this PWS? _____
☐	☒	☐	Are there any leaking system components in the water system observed by the surveyor that are not previously noted? @ Explain where and what was leaking: _____
☒	☐	☐	**At Community PWS**, do all low hazard connections have the appropriate dual check valve assemblies installed at the meter or service connection? There is a dual check valve installed at each metered connection Note: Low hazard connections include mobile home parks, farms/dairies, ranches, and shopping centers.
			For Non-community Systems, do the following connections have the indicated type of backflow prevention assemblies?
☐	☐	☒	- Stock tanks – approved air gap or atmospheric vacuum breaker at the tank? @ _____
☐	☒	☐	- Threaded yard hydrants – pressure vacuum breaker, atmospheric vacuum breaker or double check valve assembly? _____
			Does the water supplier have a record keeping program and management procedures to ensure:
☐	☒	☐	- The installation and certification by test or inspection (as applicable) of all backflow preventers (BFPs) at new service connections _____
☐	☒	☐	- The annual certification by a certified tester of all high-hazard BFPs at service connections. _____

SAFETY

Personnel Safety

Yes	No	NA	
☒	☐	☐	Are all personnel trained in proper handling of all utilized chemicals and materials? _____
☒	☐	☐	Are adequate masks, protective clothing, and safety equipment provided? _____
☒	☐	☐	Does the operator understand relevant Occupational Safety and Health Administration (OSHA) regulations (e.g., confined space, hazard communication, trenching/shoring, lock out/tag out)? _____

Chlorine Gas Safety NA ☒

☐	☐	☐	Are there chlorine warnings posted on the outside of chlorine room doors? _____
☐	☐	☐	- Do the doors open outward? _____
☐	☐	☐	- Do they open to the exterior of the building? _____
☐	☐	☐	- Are chlorine room doors equipped with crash bars? _____
☐	☐	☐	- Are chlorine room doors equipped with viewports? _____
☐	☐	☐	Is there a leak detector in the chlorine room with an audible alarm? _____
☐	☐	☐	Are chlorine feed and storage areas isolated from other facilities? _____
☐	☐	☐	Are chlorine areas adequately ventilated? _____
☐	☐	☐	Are all chlorine cylinders adequately restrained? _____
☐	☐	☐	Are self-contained breathing apparatus (SCBA) available for use in chlorine emergencies? _____
☐	☐	☐	- Are they in good working condition? _____
☐	☐	☐	- Are water system personnel adequately trained in the use and maintenance of the SCBA? _____
			- Where are the SCBA stored? _____
☐	☐	☐	Are chlorine leak kits available and are all personnel trained in their proper use? _____

Chemical Safety NA ☐

Yes	No	NA	
☒	☐	☐	Are oxidizers, corrosives, and flammables stored in separate areas and in closed, marked containers? _____
☐	☐	☒	Are flammables stored in appropriate containers and cabinets away from combustion sources? _____
☒	☐	☐	Is there adequate ventilation in the areas where solvents, aerosols, and chemical feeders are in use? _____
☒	☐	☐	Are bulk storage areas physically isolated from treatment areas to prevent spills from entering treated or untreated water? _____
☐	☒	☐	Is the fire department familiar with the facilities and their contents? _____

MANAGEMENT DATA

Yes	No	NA	
☒	☐	☐	Are there rules governing new hookups to protect the integrity of this water system? _____
☒	☐	☐	Is the treatment plant being properly operated to prevent inadequately treated water from being sent to the distribution system? @ _____
☒	☐	☐	Does the system have arrangements in place to assure prompt supply and repair service? _____
☒	☐	☐	Does the system have a current operations and maintenance manual which describes all procedures, equipment, sampling schedules and inspection data? _____
☐	☒	☐	Is there a schedule for routine preventative maintenance for all facilities and equipment? This is being worked on
☒	☐	☐	Does the system (treatment plant, finished water storage) have security measures in place (fencing, locks, lighting, alarms, etc.)? _____
☒	☐	☐	Does the system have an emergency response plan (ERP) – system does not need to show the surveyor the ERP --that includes: @ _____
☒	☐	☐	- Emergency contact phone numbers? _____
☒	☐	☐	- Procedures to respond to a pressure loss/water outage? _____
☒	☐	☐	- Procedures to respond to a water contamination incident? _____
☐	☒		Is the ERP accessible to the operator on-site? _____
☐	☒		Is the system part of a state's WARN network? _____
☐	☒		Have you evaluated possible impacts to your system from extreme weather events? If yes, what was the outcome? _____
☒	☐		Are you interested in training on extreme weather events? _____
☐	☒		Have you evaluated your facilities to see if they are in the 100 and 500 year flood plains? _____ If yes, what was the outcome? _____
What percentage of the utility's power comes from your own renewable energy sources? 0 % wind: _____ % solar: _____ % hydro: _____			

MONITORING AND RECORDS

Revised Total Coliform Rule (RTCR) monitoring (all systems)

Yes	No	
☒	☐	Does the operator know how to collect samples for total coliform analysis? (Review operator sampling procedure at time of survey to confirm) _____
☒	☐	Does the operator know what to do in the event of a total coliform "unsafe" result? _____
		They will need to take 3 repeat samples under the RTCR utilizing the regular lab form: For an explanation go to the EPA Region 8 Drinking Water Online website (http://www.epa.gov/region8-waterops) - "click" on **Revised Total Coliform Rule (RTCR)** (under Regulations and Compliance) - "click" on **Tech Tip: TC+ Follow Up** (in green box) Follow the 5 steps described in the Tech Tip for follow up sampling after a TC+ sample
☒	☐	Are extra bottles available in case of need for repeat coliform sampling? _____
☒	☐	Does the system have an RTCR sampling plan on file and available for the surveyor's review? _____
☒	☐	Ask the operator - Is the system following their RTCR sampling plan? If No, explain any difficulties _____

If subject to the Ground Water Rule (GWR), does the operator know: NA ☒

Yes	No	NA	
☐	☐	☐	Within 24 hours of being notified of a *routine coliform* positive sample result, they must collect one triggered source water sample for *every* routine coliform positive sample at each active ground water source (e.g., three routine coliform positive samples requires the operator to collect three source water samples from *each* ground water source)? _____
			They will need to submit:
☐	☐	☐	- Source water sample results utilizing the triggered Ground Water Rule Source Sampling Form located on the Drinking Water Online site (http://www.epa.gov/region8-waterops)? _____
☐	☐	☐	Where to sample if they are required to sample all of their active ground water sources? _____
☐	☐	☐	Are extra bottles available in case of the need for GWR source sampling? _____

For Community and NTNC systems (including consecutives): NA ☐

Yes	No	NA	
☒	☐	☐	Is there a Disinfection Byproducts Rule Monitoring Plan on-site available for the surveyor's review? _____
☒	☐	☐	- Is it up-to-date reflecting the current distribution system? _____
☒	☐	☐	- In the last 5 years, have water mains been extended to new service areas? _____
☐	☒	☐	- If Yes, did the total amount of new water mains exceed 2500 feet? _____
☐	☒	☐	Does the system have a Lead & Copper Tap Sample Site Plan on file and available for the surveyor's review? _____
☐	☒	☐	- Is it up to date? _____
☐	☒	☐	- Ask the operator – is the system following their LCR Tap Sample Site Plan? If no, explain any difficulties _____

For All Systems:

Yes	No	NA	
☒	☐	☐	Does the operator know the location of each entry point to the distribution system? _____
☒	☐	☐	Does the operator know how to properly label samples taken from the entry points? _____
☒	☐	☐	Has the PWS completed the monitoring that is specified in the EPA-provided monitoring schedule so far for this calendar year? _____
☒	☐	☐	Are copies of all monitoring results filed and readily accessible? _____
☒	☐	☐	Is the operator familiar with the Drinking Water Online (http://www.epa.gov/region8-waterops) and Drinking Water Watch (https://sdwisr8.epa.gov/Region8DWW/JSP/loginForm.jsp) websites created for their benefit? _____

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 1

Subject: Four Bears Water Treatment Plant

Comments:

Photo #: 2

Subject: Plant inlet piping, raw water turbidimeter, chemical feed point

Comments: Chief Operator, Bruce Fox is pictured

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 3

Subject: New flocculation and plate settler tank.

Comments: Flocculator under grating in foreground, plate settler in background

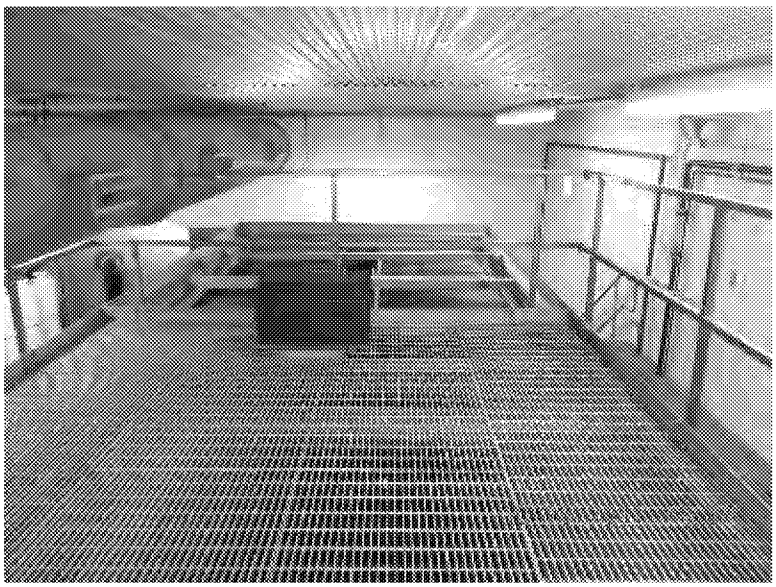
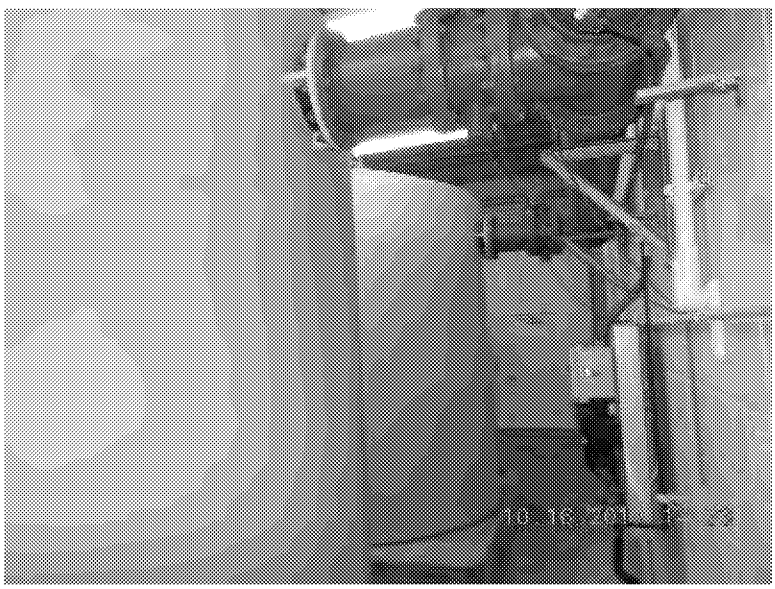


Photo #: 4

Subject: Membrane feed tanks

Comments: After sedimentation, water enters membrane feed tanks, there are two membrane trains



EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 5

Subject: Membrane feed pump

and Toray pressure membrane modules

Comments:

Pressure membrane modules

Feed pump

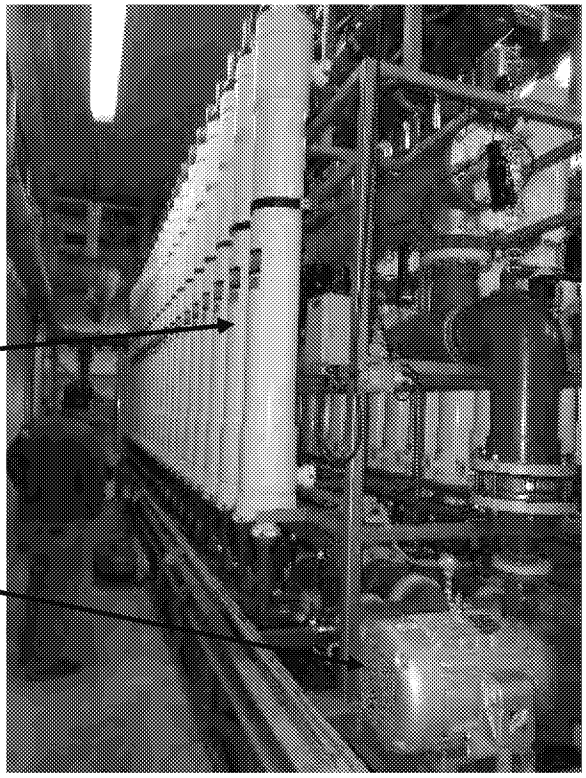
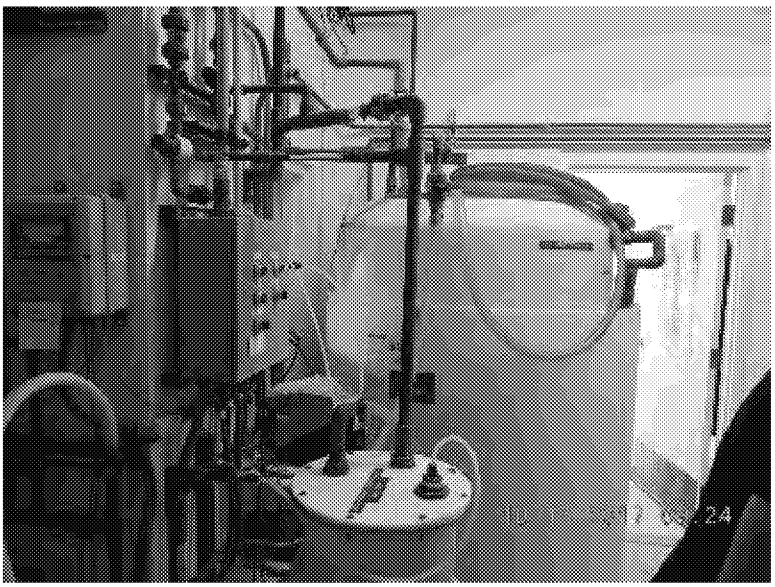


Photo #: 6

Subject: Chemical feed equipment

Comments: Pictured is ACH feed equipment which is typical of the feed systems for the coagulant and the sodium hypochlorite



EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 6

Subject: Combined filter effluent turbidimeter

Comments:

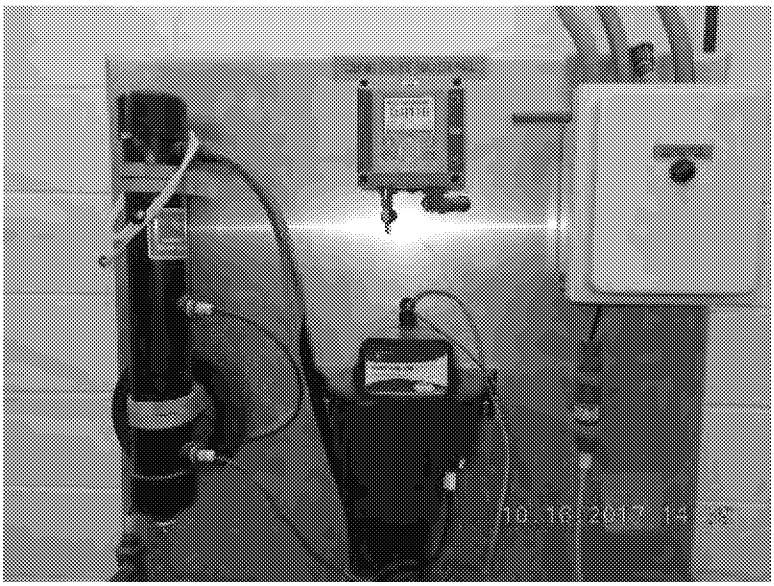
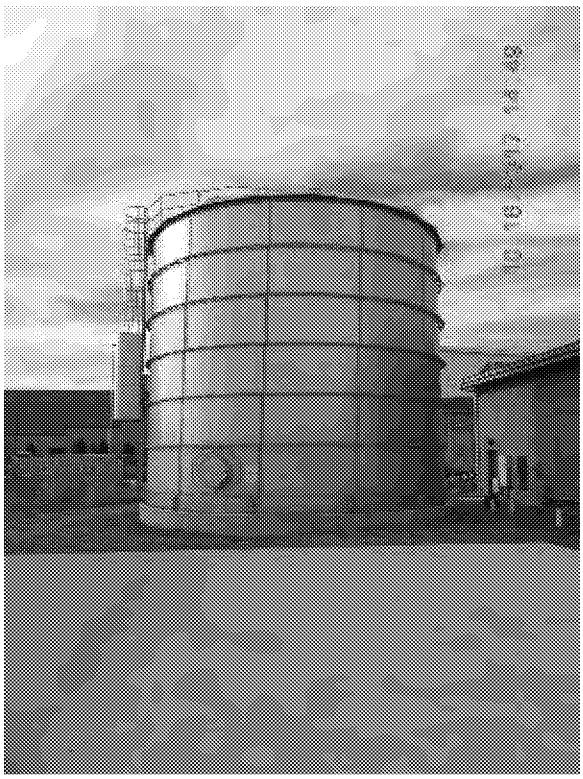


Photo #: 7

Subject: Bolted steel clearwell (ST02)

Comments: After filtration the water enters two clearwells, configured in series. This bolted steel clearwell is the first of these.



EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 8

Subject: Bolted steel clearwell (ST02), overflow

Comments:

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 9

Subject: Bolted steel clearwell (ST02), drain

Comments:

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 10

Subject: Concrete clearwell (ST04)

Comments:

Photo #: 11

Subject: Concrete clearwell (ST04), screened vent

Comments: Photo shows one of two identical vents

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 12

Subject: Concrete clearwell (ST04), screened overflow

Comments:

Photo #: 13

Subject: Concrete clearwell (ST04), hatch

Comments: ~12" above the roof

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 14

Subject: High service pumps

Comments:

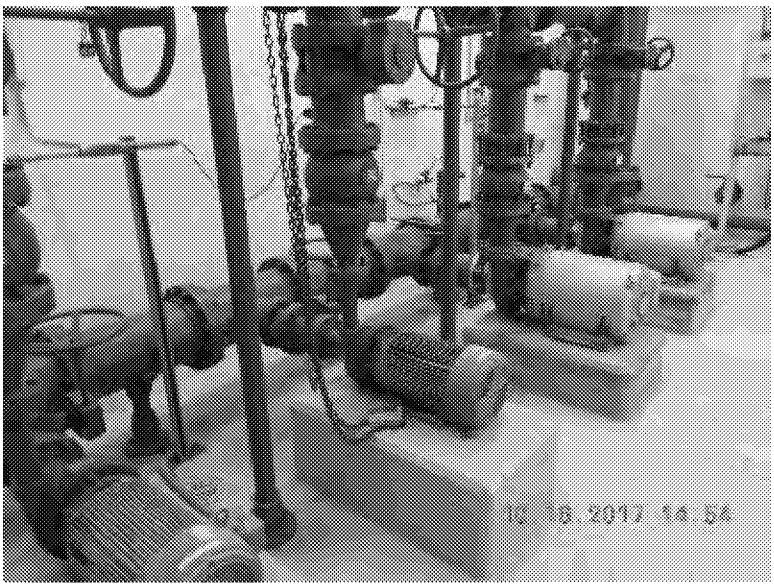


Photo #: 15

Subject: Intake pump building

Comments:

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 16

Subject: Intake pump building, interior

Comments:

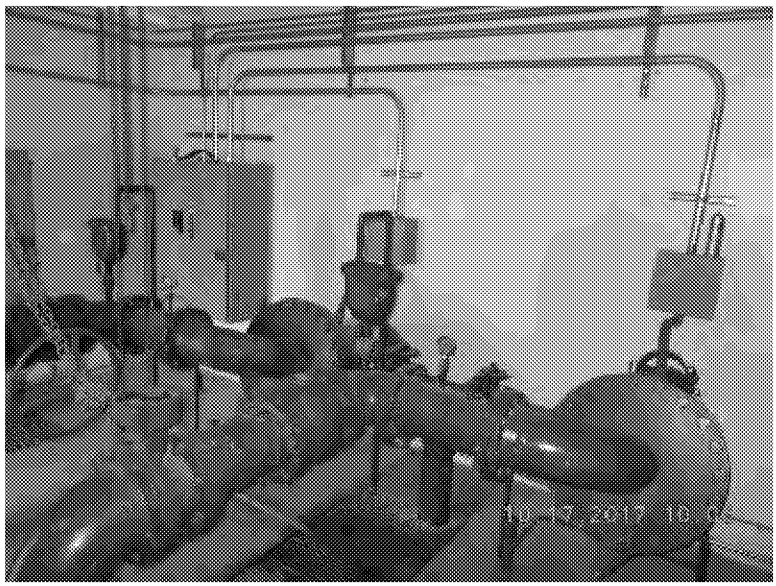


Photo #: 17

Subject: West Booster Station

Comments:

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 18

Subject: West Booster Station, interior

Comments:

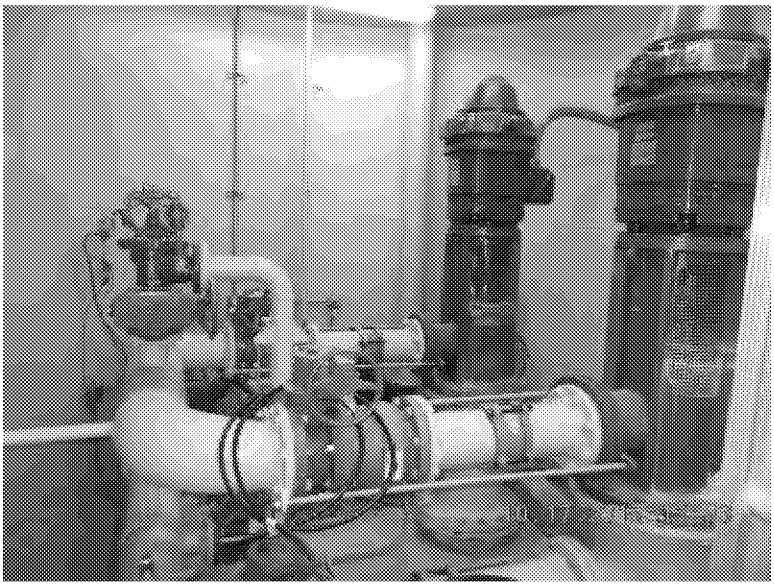
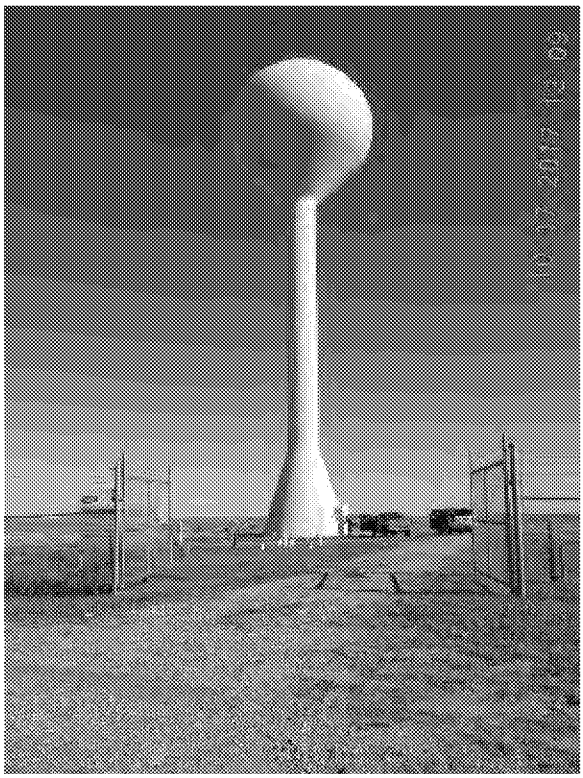


Photo #: 19

Subject: West Tower (ST01)

Comments:



EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 20

Subject: West Tower (ST01), combined drain and overflow

Comments:

Photo #: 21

Subject: West Tower (ST01), vent

Comments: Photo by Kris Neset of the Indian Health Service, 9/16/2017

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 22

Subject: West Tower (ST01), vent

Comments: Photo by Kris Neset of the Indian Health Service, 9/16/2017

Photo #: 23

Subject: West Tower (ST01), hatch

Comments: Photo by Kris Neset of the Indian Health Service, 9/16/2017

EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 24

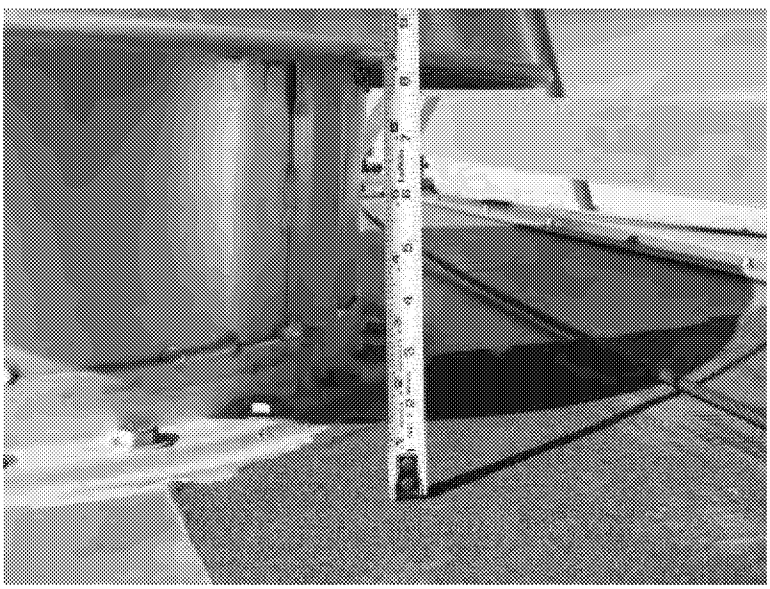
Subject: Dragswolf tank (ST03)

Comments:

Photo #: 25

Subject: Dragswolf tank (ST03), vent

Comments: Photo by Nathan Watson of the BOR, 10/19/2017



EPA Official Photographs

PWS #: 083890015

System Name: Four Bears

County: Mountrail

Date: October 16, 2017

Photographer: David Schultz, RATES

Photo #: 26

Subject: Dragswolf tank (ST03), hatch

Comments: Photo by Nathan Watson of the BOR, 10/19/2017